

APPENDIX D**Final Regulatory Flexibility Analysis**

(*Second Report and Order* in WT Docket No. 01-289)

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Further Notice of Proposed Rule Making (FNPRM)* in this proceeding.² The Commission sought written public comment on the proposals in the *FNPRM*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Second Report and Order

The rules adopted in the *Second Report and Order* are intended to ensure that the Commission's Part 87 rules governing the Aviation Radio Service remain up-to-date and continue to further the Commission's goals of accommodating new technologies, facilitating the efficient and effective use of the aeronautical spectrum, avoiding unnecessary regulation, and, above all, enhancing the safety of flight. Specifically, in the *Second Report and Order* the Commission (a) authorizes the use of Universal Access Transceiver (UAT) technology on the frequency 978 MHz;⁴ (b) removes all of the former Civil Air Patrol (CAP) channels from the table of frequencies available for assignment under Part 87;⁵ (c) removes allocations for radionavigation in the 14000-14400 MHz band;⁶ (d) streamlines the listing of high frequency (HF) channels in the table of frequencies available for assignment under Part 87;⁷ (e) provides the FAA with greater flexibility in the use of air traffic control (ATC) frequencies;⁸ (f) declines to adopt rules that would authorize a new type of emergency locator transmitter (ELT) designed to operate on the frequency 121.5 MHz;⁹ (g) codifies the terms of a waiver permitting use of an alternative station identification format by aircraft that are being moved by maintenance personnel from one airport location to another;¹⁰ (h) eliminates the rule authorizing the assignment of FCC control numbers to ultralight aircraft for station identification;¹¹ and (i) declines at present to make any rule changes pertaining to the Plan for the Security Control of Air Traffic and Air Navigation Aids (SCATANA).¹²

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² Amendment of Part 87 of the Commission's Rules Concerning the Aviation Radio Service, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 01-289, 18 FCC Rcd 21432 (2003).

³ See 5 U.S.C. § 604.

⁴ See para. 8, *supra*.

⁵ See para. 18, *supra*.

⁶ See para. 19, *supra*.

⁷ See para. 21, *supra*.

⁸ See para. 22, *supra*.

⁹ See para. 24, *supra*.

¹⁰ See para. 25, *supra*.

¹¹ See para. 27, *supra*.

¹² See para. 28, *supra*.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

No comments were submitted specifically in response to the IRFA. Nonetheless, we have considered the potential economic impact on small entities of the rules discussed in the IRFA, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules enacted herein.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.¹³ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁴ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁵ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹⁶

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this FRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless service providers. The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”¹⁷ and “Cellular and Other Wireless Telecommunications.”¹⁸ Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.¹⁹ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.²⁰ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.²¹ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19

¹³ 5 U.S.C. § 604(a)(3).

¹⁴ *Id.* § 601(6).

¹⁵ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

¹⁶ Small Business Act, 15 U.S.C. § 632 (1996).

¹⁷ 13 C.F.R. § 121.201, NAICS code 517211.

¹⁸ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

²⁰ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

²¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

firms had employment of 1,000 employees or more.²² Thus, under this second category and size standard, the majority of firms can, again, be considered small.

Some of the rules adopted herein may also affect small businesses that manufacture aviation radio equipment. The Commission has not developed a definition of small entities applicable to aviation radio equipment manufacturers. Therefore, the applicable definition is that for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturers. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."²³ The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.²⁴ According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.²⁵ Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.²⁶ Thus, under this size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

The *Second Report and Order* does not impose any additional reporting, recordkeeping, or other compliance requirements on small entities. The rule amendments adopted in the *Second Report and Order* generally either relieve licensees of pre-existing technical constraints or simply streamline and update the Commission's Rules in a manner that will have no impact at all on regulatory compliance costs.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."²⁷

²² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

²³ U.S. Census Bureau, 2002 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing"; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

²⁴ 13 C.F.R. § 121.201, NAICS code 334220.

²⁵ U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

²⁶ *Id.* An additional 18 establishments had employment of 1,000 or more.

²⁷ 5 U.S.C. § 603(c)(1)-(4).

As explained in Section D of this FRFA, *supra*, the *Second Report and Order* does not impose any additional reporting, recordkeeping, or other compliance requirements on small entities. In the *Second Report and Order*, the Commission discusses the possibility of further relaxing AMS(R)S technical requirements to accommodate non-Inmarsat satellite systems, and the Commission did consider, as one alternative, immediately amending the Part 80 rules for that purpose.²⁸ The Commission ultimately decided, however, that it would be prudent to seek further comment on this question, especially in light of the fact that the International Civil Aviation organization (ICAO) has not yet adopted Standards and Recommended Practices for such AMS(R)S operations.²⁹ Similarly, the Commission could have adopted Part 87 licensing rules for AMS(R)S in the 1.6 GHz, 2 GHz, and 5 GHz frequency bands, subject to a requirement that satellite system operators accord priority and preemptive access to AMS(R)S communications over other types of communications. The Commission deferred a final decision on this matter, primarily to acquire additional information regarding whether such a priority and preemptive access requirement is truly necessary, and regarding the burden such a requirement may impose on MSS/AMS(R)S licensees.³⁰

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

Report to Congress: The Commission will send a copy of the *Second Report and Order* in WT Docket No. 01-289, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress pursuant to the Congressional Review Act.³¹ In addition, the Commission will send a copy of the *Second Report and Order* in WT Docket No. 01-289, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the *Second Report and Order* in PR Docket No. 92-257 and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the Federal Register.³²

²⁸ See para. 10, *supra*.

²⁹ *Id.*

³⁰ See para. 16, *supra*.

³¹ See 5 U.S.C. § 801(a)(1)(A).

³² See *id.* § 604(b).

APPENDIX E

Initial Regulatory Flexibility Analysis

(*Second Further Notice of Proposed Rule Making* in WT Docket No. 01-289)

As required by the Regulatory Flexibility Act (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in the *Second Further Notice of Proposed Rule Making* in WT Docket No. 01-289 (*2d FNPRM*). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *2d FNPRM* as provided in paragraph 49 of the item, *supra*. The Commission will send a copy of the *2d FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.² In addition, the *2d FNPRM* and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

The proposed rules in the *2d FNPRM* are intended to further streamline, consolidate and clarify the Commission's Part 87 Rules; remove unnecessary or duplicative requirements; address new international requirements; and promote flexibility and efficiency in the use of aviation radio equipment in a manner that will further aviation safety. In the *2d FNPRM*, we request comment specifically on whether we should: (a) broaden the AMS(R)S rules to accommodate the provision of AMS(R)S by additional satellite systems;⁴ (b) mandate that AMS(R)S communications in the 1.6 GHz, 2 GHz, and 5 GHz frequency bands be given priority and preemptive access;⁵ (c) delete a regulatory provision which permits limited use of the VHF band for AMS(R)S communications;⁶ (d) consider proposing rules that would require a transition to 8.33 kHz channelization in the aeronautical enroute service;⁷ (e) reduce the number of frequencies designated for Flight Information Services – Broadcast (FIS-B);⁸ (f) codify the terms of a special temporary authorization (STA) permitting the use of specified frequencies for air-to-air communications in Hawaii;⁹ (g) codify the terms of an STA permitting the use of specified frequencies for air-to-air communications in the Los Angeles area;¹⁰ (h) clarify the circumstances under which an airport is limited to a single aeronautical advisory station (unicom);¹¹ (i) permit the assignment and

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ *Id.*

⁴ See paras. 30-31, *supra*.

⁵ See para. 32, *supra*.

⁶ See para. 33, *supra*.

⁷ See paras. 34-36, *supra*.

⁸ See para. 37, *supra*.

⁹ See para. 38, *supra*.

¹⁰ See para. 39, *supra*.

¹¹ See para. 40, *supra*.

transfer of control of aircraft radio licenses,¹² and (j) phase out the authorization of ELTs designed to operate on 121.5 MHz.¹³

B. Legal Basis

Authority for issuance of this item is contained in Sections 4(i), 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r) and 403.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.¹⁵ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁶ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁷ A small business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹⁸ Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency after consultation with the Office of Advocacy of the SBA, and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this IRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless service providers. The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”¹⁹ and “Cellular and Other Wireless Telecommunications.”²⁰ Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.²¹ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.²² Thus, under this category and associated small business size

¹² See paras. 41-42, *supra*.

¹³ See para. 43, *supra*.

¹⁵ 5 U.S.C. § 603(b)(3).

¹⁶ *Id.*

¹⁷ 5 U.S.C. § 601(3).

¹⁸ 5 U.S.C. § 632.

¹⁹ 13 C.F.R. § 121.201, NAICS code 517211.

²⁰ 13 C.F.R. § 121.201, NAICS code 517212.

²¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

²² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.²³ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.²⁴ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

Some of the rules proposed herein may also affect small businesses that manufacture aviation radio equipment. The Commission has not developed a definition of small entities applicable to aviation radio equipment manufacturers. Therefore, the applicable definition is that for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturers. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."²⁵ The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.²⁶ According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.²⁷ Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.²⁸ Thus, under this size standard, the majority of firms can be considered small.

Some of the rules proposed herein may also affect providers of satellite telecommunications services. There is no small business size standard developed specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad census categories of "Satellite Telecommunications" and "Other Telecommunications." Under both categories, such a business is small if it has \$13.5 million or less in average annual receipts.²⁹

The first category of Satellite Telecommunications "comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via

²³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

²⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

²⁵ U.S. Census Bureau, 2002 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing"; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

²⁶ 13 C.F.R. § 121.201, NAICS code 334220.

²⁷ U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

²⁸ *Id.* An additional 18 establishments had employment of 1,000 or more.

²⁹ 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

a system of satellites or reselling satellite telecommunications.”³⁰ For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.³¹ Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.³² Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

The second category of Other Telecommunications “comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems.”³³ For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.³⁴ Of this total, 259 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.³⁵ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

Most of the possible rule changes under consideration in the *2d FNPRM* generally would not impose any new compliance requirements on any entity. The proposals to codify existing STAs would, if adopted, relieve aircraft operators in Hawaii and the Los Angeles area of the regulatory restrictions that impelled them to seek those STAs.³⁶ With two exceptions, we believe the other proposed rules would have no significant effect on the compliance burdens of regulatees. We invite comment on our tentative conclusion that the following possible rule changes will not have a negative impact on small entities, or for that matter any entities, and do not impose new compliance costs on any entity: (1) reducing the number of frequencies designated for FIS-B; (2) codifying the terms of the STA permitting the use of specified frequencies for air-to-air communications in Hawaii; (3) codifying the terms of the STA permitting the use of specified frequencies for air-to-air communications in the Los Angeles area; (4) clarifying the circumstances under which an airport is limited to a single unicom; (5) permitting the assignment and transfer of control of aircraft radio licenses; (6) phasing out the authorization of ELTs designed to operate on 121.5 MHz; and (7) deleting a regulatory provision which permits limited use of the VHF band for AMS(R)S communications. To the extent that commenters believe that any of the above possible rule changes would impose a new reporting, recordkeeping, or compliance burden on small entities, we ask that they describe the nature of that burden in some detail and, if possible, quantify the costs to small entities.

³⁰ U.S. Census Bureau, 2002 NAICS Definitions, “517410 Satellite Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

³¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517410 (issued Nov. 2005).

³² *Id.* An additional 38 firms had annual receipts of \$25 million or more.

³³ U.S. Census Bureau, 2002 NAICS Definitions, “517910 Other Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

³⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517910 (issued Nov. 2005).

³⁵ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

³⁶ See paras. 38-39, *supra*.

We are considering in the *2d FNPRM* whether to mandate that mobile satellite systems providing AMS(R)S accord priority and preemptive access to AMS(R)S communications vis-à-vis public correspondence and other non-safety-related communications in the 1.6 MHz, 2 MHz, and 5 MHz bands,³⁷ as they already are required to do in the 1545-1559 MHz and 1646.5-1660.5 MHz bands.³⁸ To the extent that such a requirement would impose a new compliance burden, however, the burden would fall only on mobile satellite service (MSS) licensees. MSS licensees are not small entities.³⁹ Accordingly, we do not believe this requirement will have a direct and significant economic impact on any small entities.

In addition, we believe that mandating a transition to 8.33 kHz channel spacing in the aeronautical enroute service might impose a new compliance burden on aircraft station licensees because of the need to replace existing avionics equipment designed to operate with 25 kHz channel spacing. This burden might be incurred not only by the major air carriers, but also by smaller carriers and others that may qualify as small entities. In the *2d FNPRM*, we seek comment on whether the public interest benefits of a mandatory narrowbanding of the aeronautical enroute spectrum would outweigh the costs and difficulties that such an effort would engender.⁴⁰ We seek estimates of projected compliance costs, with an explanation of all assumptions on which the estimates are based.⁴¹ We here reiterate that request, and we specifically ask interested parties to address potential compliance costs for small entities.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.⁴²

In the *2d FNPRM*, we request further comment on, *inter alia*, the nature of any burden that might be incurred by MSS licensees if required to provide priority and preemptive access to AMS(R)S communications in the 1.6 GHz, 2 GHz, and 5 GHz frequency bands. For reasons stated above, we believe MSS licensees are not small entities. Commenters who believe otherwise are invited to explain why MSS licensees should be deemed small entities, and to propose steps, such as those described in the immediately preceding paragraph, that might eliminate or minimize the burden of a priority and preemptive access requirement on MSS licensees.

In the *2d FNPRM*, we also seek comment on various means of limiting the impact of a transition to 8.33 kHz channel spacing in the aeronautical enroute service in the event such a transition is mandated.

³⁷ See para. 32, *supra*.

³⁸ See 47 C.F.R. §§ 2.106, n.US308, 87.187(q).

³⁹ See, e.g., Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, *Report and Order and Notice of Proposed Rule Making*, IB Docket No. 01-185, 18 FCC Rcd 1962, 2215 ¶ 5 [of Appendix E: Initial Regulatory Flexibility Analysis] (2003) (observing that “[s]mall businesses may not have the financial ability to become MSS system operators because of the high implementation costs associated with satellite systems and services” and therefore concluding that “because of the high implementation costs and the limited spectrum resources, we do not believe that small entities will be impacted by this [MSS-related] rulemaking to a great extent.”).

⁴⁰ See para. 36, *supra*.

⁴¹ *Id.*

⁴² 5 U.S.C. § 603(c)(1)-(4).

We ask commenters to suggest the appropriate duration of any period(s) of transition and to consider whether grandfathering provisions of some sort should be adopted to mitigate the costs of retrofitting aircraft.⁴³ We also ask whether transition schedules should be staggered based on criteria relating to the size of the carrier or the class of aircraft.⁴⁴ We reiterate those requests here, and ask interested parties to consider any other means to lessen potential compliance burdens on small entities if the Commission ultimately mandates a transition to 8.33 kHz channel spacing in the aeronautical enroute service. In addition, to the extent commenters believe any of the other possible rule changes discussed in the *2d FNPRM* might impose any significant economic impact on small entities, we invite them to address any or all of the aforementioned regulatory alternatives and to suggest additional alternatives to minimize that impact. Any significant alternative presented in the comments will be considered.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

⁴³ *Id.*

⁴⁴ *Id.*